

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Brassica oleracea*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(E)-HEX-2-EN-1-OL	Stem	0.08	0.08		
0	(Z)-HEX-3-EN-1-OL	Stem	0.19	0.19		
0	1-METHYLTHIOPENTAN-3-ONE	Stem	0.1	0.1		
0	2(OR_3)-METHYLINDOLE	Stem	0.19	0.19		
0	2,3-DIMETHYL-PYRAZINE	Plant	--	--		
0	2,4,5-TRIMETHYL-THIAZOLE	Stem	0.11	0.11		
0	2,4,5-TRIMETHYLOXAZOLE	Stem	0.02	0.02		
0	2,5-DIMETHYL-6-VINYLPYRAZINE	Stem	0.19	0.19		
0	2,5-DIMETHYL-PYRAZINE	Stem	0.38	0.38		
0	2,5-DIMETHYLTHIOPHEN-3-CARBOXYALDEHYDE	Stem	0.02	0.02		
0	2,6-DIMETHYL-PYRAZINE	Stem	0.57	0.57		
0	2-ACETYL-4-METHYLTHIAZOLE	Stem	0.02	0.02		
0	2-ACETYL-FURAN	Stem	0.02	0.02		
0	2-ACETYL-PYRIDINE	Stem	0.02	0.02		
0	2-ACETYLTHIAZOLE	Stem	--	--		
0	2-ACETYLTHIOPHEN	Stem	0.02	0.02		
0	2-ETHYL-FURAN	Stem	0.08	0.08		
3	2-FURALDEHYDE	Stem	0.38	0.38		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	2-METHOXY-4-VINYL-PHENOL	Stem	0.17	0.17		
0	2-METHYL-6-VINYLPYRAZINE	Stem	0.04	0.04		
0	2-METHYL-BUTAN-1-OL	Stem	1.14	1.14		
0	2-METHYL-BUTANAL	Stem	0.76	0.76		
0	2-PENTYL-FURAN	Stem	0.06	0.06		
0	2-PHENETHYL-ISOTHIOCYANATE	Stem	0.57	0.57		
0	3(OR_5)-METHYLTHIOPHEN-2-CARBOXYALDEHYDE	Stem	0.38	0.38		
0	3,5,5-TRIMETHYLCYCLOHEX-2-ENONE	Stem	0.06	0.06		
0	3-(METHYLTHIO)-PROPYL-ISOTHIOCYANATE	Stem	3.61	3.61		
0	3-INDOLYLACETONITRILE	Stem	0.57	0.57		
0	3-METHYL-BUTAN-1-OL	Stem	--	--		
0	3-METHYL-BUTANAL	Stem	0.02	0.02		
0	3-METHYLBUTANONITRILE	Stem	0.04	0.04		
0	3-PHENYLPROPANONITRILE	Stem	7.98	7.98		
0	4-(METHYLTHIO)-BUTANONITRILE	Stem	27.6	27.6		
0	4-(METHYLTHIO)-BUTYL-ISOTHIOCYANATE	Stem	6.08	6.08		
0	4-METHYLTHIOPUTAN-2-ONE	Stem	0.17	0.17		
0	5-(METHYLTHIO)-PENTANONITRILE	Stem	61.4	61.4		
0	5-HYDROXY-GLUCOBRASSICIN	Tissue Culture	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	5-HYDROXY-GLUCOBRASSICIN	Sprout Seedling	--	--		
0	5-METHOXY-GLUCOBRASSICIN	Tissue Culture	--	--		
15	ALPHA-LINOLENIC-ACID	Stem	260	2889		
14	ARGININE	Stem	1050	11667		
112	ASCORBIC-ACID	Stem	620	6890	1.2602259509666862	
0	ASH	Stem	7000	111110	1.8856973536198134	
24	BENZALDEHYDE	Stem	0.02	0.02		
53	BETA-CAROTENE	Stem	0.24	2.67	-0.848867975828728	
0	BUTANEDIONE	Stem	0.02	0.02		
28	CALCIUM	Stem	200	2665	-1.743501400177818	
0	CARBOHYDRATES	Stem	59000	688900	-1.414170983098101	
0	CARBON-DISULFIDE	Stem	0.19	0.19		
23	CITRIC-ACID	Stem	--	--		
0	CYCLOHEXANE	Stem	--	--		
2	CYSTINE	Stem	70	778		
0	DECA-2-ONE	Stem	0.02	0.02		
0	DI-(2-METHYLPROPYL)-PHTHALATE	Stem	0.1	0.1		
0	DIBUTYL-PHTHALATE	Stem	1.52	1.52		
2	DIMETHYL-DISULFIDE	Stem	11.21	11.21		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	DIMETHYL-SULFIDE	Stem	0.38	0.38		
0	DIMETHYL-TRISULFIDE	Stem	47.5	47.5		
0	DIOCTYL-PHTHALATE?	Stem	3.42	3.42		
0	EICOSANE	Stem	--	--		
0	EO	Stem	190	190	-0.485851745173221	
0	ETHYL-METHYL-DISULFIDE	Stem	0.02	0.02		
0	FAT	Stem	1000	11110	-1.4508583793989052	
15	FIBER	Stem	1000	11110	-1.296031725728545	
7	FUMARIC-ACID	Stem	--	--		
1	GLUCOBRASSICIN	Sprout Seedling	--	--		
1	GLUCOBRASSICIN	Tissue Culture	--	--		
0	HENEICOSANE	Stem	--	--		
0	HEPTA-2,4-DIENAL	Stem	0.04	0.04		
0	HEPTANONITRILE	Stem	0.04	0.04		
0	HEXADECAN-1-OL	Stem	0.57	0.57		
5	HEXANAL	Stem	0.04	0.04		
0	HEXANE	Stem	0.04	0.04		
0	HEXANONITRILE	Stem	0.06	0.06		
7	HISTIDINE	Stem	190	2111		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	INDOLE	Stem	1.33	1.33		
6	IRON	Stem	4	44	-0.6545398138876424	
3	ISOLEUCINE	Stem	780	8667		
75	KAEMPFEROL	Shoot	80	80	1.7121854289040663	
0	KILOCALORIES	Stem	270	3000		
2	LEUCINE	Stem	670	7445		
0	LINALOL	Stem	0.08	0.08		
0	LINALOL-OXIDE	Stem	0.06	0.06		
27	LINOLEIC-ACID	Stem	200	2222		
4	LYSINE	Stem	560	6222		
65	MAGNESIUM	Stem	190	2110	-1.1184243746609566	
15	MALIC-ACID	Stem	--	--		
0	METHANETHIOL	Stem	0.02	0.02		
15	METHIONINE	Stem	130	1445		
0	METHYL-OCTANOATE	Stem	--	--		
0	METHYL-PROPANOL	Stem	0.08	0.08		
0	METHYL-PROPYL-SULFIDE	Stem	0.08	0.08		
0	METHYL-PYRAZINE	Stem	0.08	0.08		
13	MUFA	Stem	70	780		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
6	MYRISTIC-ACID	Stem	--	--		
1	NEOGLUCOBRASSICIN	Sprout Seedling	--	--		
1	NEOGLUCOBRASSICIN	Tissue Culture	--	--		
39	NIACIN	Stem	4	44		
0	NONADECANE	Stem	--	--		
0	OCTADECANE	Stem	--	--		
0	OCTAN-1-OL	Stem	0.02	0.02		
18	OLEIC-ACID	Stem	70	780		
13	PALMITIC-ACID	Stem	110	1220		
2	PALMITOLEIC-ACID	Stem	--	--		
11	PANTOTHENIC-ACID	Stem	1.6	18		
0	PENT-1-EN-3-OL	Stem	0.04	0.04		
0	PENTAN-1-OL	Stem	0.02	0.02		
0	PENTANE	Stem	0.76	0.76		
0	PHENYLACETONITRILE	Stem	0.19	0.19		
7	PHENYLALANINE	Stem	390	4333		
4	PHOSPHORUS	Stem	400	5110	1.9403763589789504	
14	POTASSIUM	Stem	3500	38890	2.4970609485330573	
0	PROTEIN	Stem	11000	188900	1.4142135623730951	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	PUFA	Stem	480	4335		
0	PYRAZINE	Stem	--	--		
3	PYRIDINE	Stem	1.52	1.52		
176	QUERCETIN	Shoot	20	20	-0.6593174841787172	
15	RIBOFLAVIN	Stem	0.2	2.2	-0.9061422578020815	
0	SFA	Stem	130	1445		
1	SODIUM	Stem	200	2222	2.185328983729152	
8	STEARIC-ACID	Stem	10	110		
0	TETRADECAN-1-OL	Stem	0.1	0.1		
31	THIAMIN	Stem	0.5	5.5	-1.3665296611918556	
0	THIOPHEN-2-CARBOXYALDEHYDE	Stem	0.04	0.04		
0	THIOPHEN-3-CARBOXYALDEHYDE	Stem	0.04	0.04		
4	THREONINE	Stem	490	5445		
1	TOLUENE	Stem	0.08	0.08		
0	TRICOSANE	Stem	--	--		
0	TRIMETHYL-PYRAZINE	Stem	0.06	0.06		
29	TRYPTOPHAN	Stem	100	1110		
3	VALINE	Stem	500	5555		
0	VINYLPYRAZINE	Stem	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	VIT-B-6	Stem	1.5	17		
0	WATER	Stem	910000	921000	0.6202998314873419	